A. MEYER.

COMBINATION TRAP AND FIXTURE.

APPLICATION FILED DEC. 15, 1910.

1,039,169. Patented Sept. 24, 1912.

Fig. 1.

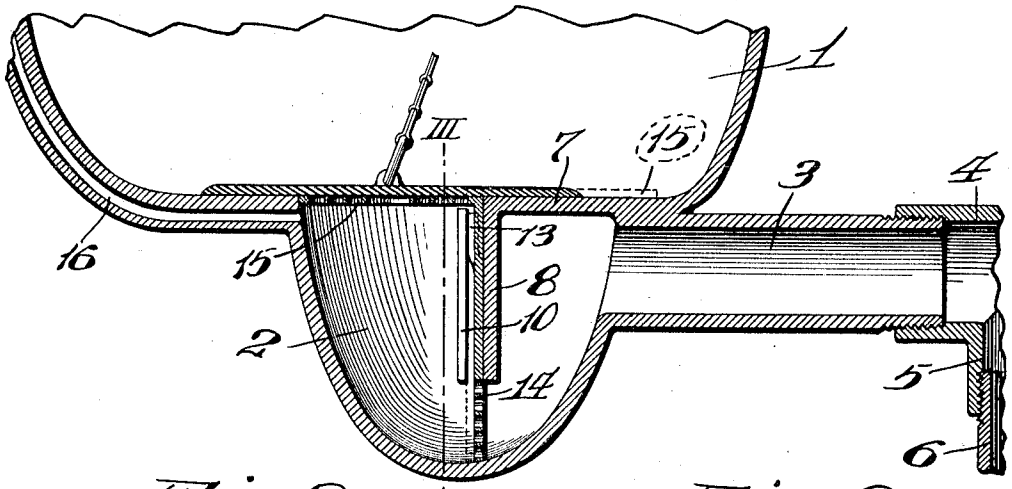
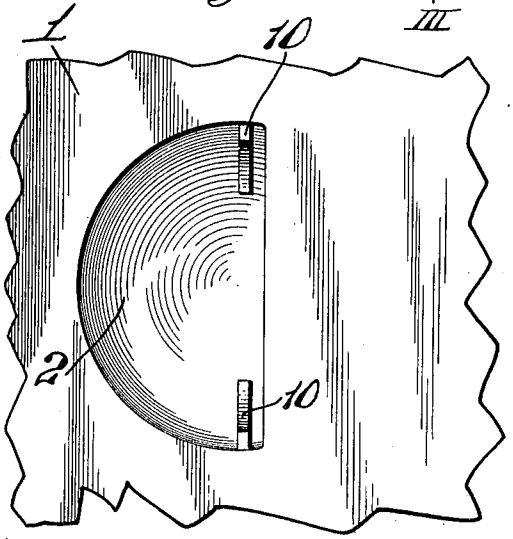


Fig. 2.



III

Fig. 3.

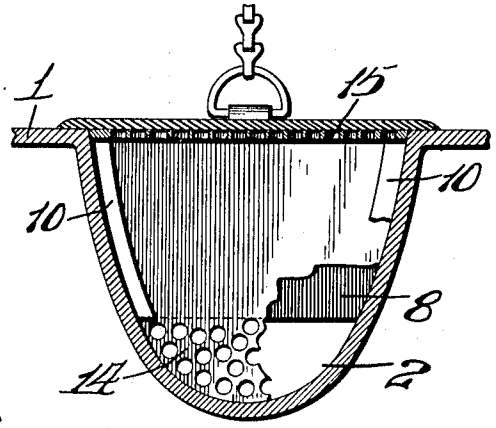


Fig. 4.

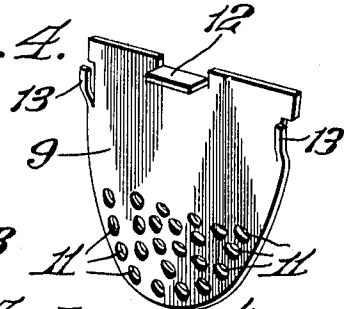
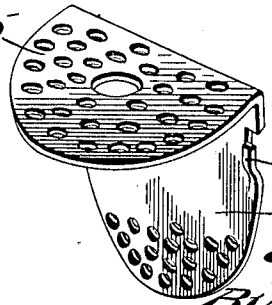


Fig. 5.



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UNITED STATES PATENT OFFICE.

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COMBINATION TRAP AND FIXTURE.

1,039,169. Specification of Letters Patent. **Patented Sept. 24, 1912.**

Application filed December 15, 1910. Serial No. 597,571.

To all whom it may concern:

Be it known that I, ADOLPH MEYER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Combination Traps and Fixtures, of which the following is a specification.

This invention relates to sanitary traps and fixtures and has for its primary object to provide an improved combined trap and fixture of this character which can be simply and economically constructed and which will be efficient and durable in use.

One object of the present invention is to provide an improved sanitary fixture of this character which is adapted to more efficiently protect the users thereof against the loss of jewelry and other articles which may be washed into the drain leading from the fixture.

Another object is to provide an improved trap for devices of this character and an improved strainer operatively related to said trap and removable therefrom to permit cleaning of the same.

Other and further objects will appear in the specification and be specifically pointed out in the appended claim, reference being had to the accompanying drawings exemplifying the invention and in which,

Figure 1 is a central vertical section through a sanitary fitting embodying my improved device. Fig. 2 is a top plan fragmentary view of the same. Fig. 3 is a section on the line III—III, of Fig. 1. Fig. 4 is a perspective view of the strainer removed. Fig. 5 is a perspective view of a modified form of the strainer.

Referring more particularly to the drawings, and in the present embodiment of my invention, the bottom wall 1 of the bowl, basin, tub or similar sanitary fixture, is inclined downwardly toward a cup or well 2 which depends from the bottom of the bowl or basin 1 and is preferably integrally formed therewith. Leading from the cup or well 2 and disposed so as to have its lower wall at a higher elevation than the bottom of said cup or well, is a drain pipe 3 to the outer end of which is connected a T-fitting 4 from the depending branch 5 of which leads a pipe 6 discharging into a sewer in the usual manner. The other horizontal branch of the T 4 may, in the usual manner, be connected to a vent pipe (not shown).

As shown best in Figs. 1 and 2, a screening partition is provided for the well 2 which forms with the water, which naturally accumulates in said well, an airtight inclosure for the opening into said drain pipe, said screening partition comprising a portion 7 preferably forming a continuation of the lower wall 1 of the basin, a depending portion or apron 8 and a relatively movable portion 9. Said removable portion 9 is in the form of a strainer plate slidably mounted on the depending portion 8 within guideways formed by the lugs or rails 10 projecting from the lateral walls of the cup 2. The lower end of the plate 9 is provided with a number of screening perforations 11 which permit the water to discharge therethrough but prevent the passage of any articles or debris. Said screening plate 9 is provided with a laterally projecting ear or lug 12 by means of which it may be readily removed and replaced in position when desired. In order to provide means for resisting accidental displacement of the strainer plate 9, resilient means interengaging between said plate and the guide lugs 10 is provided in the form of fingers 13 formed by partly severing a portion of the plate 9. For this purpose, the strainer plate 9 may be made of sheet brass or the like having a high degree of resiliency.

Referring now to Fig. 5 of the drawings, which shows a modified construction of the strainer, a piece of the metal is bent in the form of a right angle whose vertical portions 14 correspond substantially to the strainer plate 9 both in respect to the position which it occupies and the functions which it serves. The horizontal portion 15 of this modified strainer plate is designed to exactly cover the opening from the bowl or basin into the cup or well 2, so that if desired, a strainer may be provided which forms a continuation of the bottom of the bowl 1. This modified form of strainer plate is adapted to serve the functions of the strainer plate 9, by reversing its position so as to have the horizontal portion 15 rest upon the ledge 7, (see Fig. 1).

The advantageous features of my device will now be appreciated, and briefly stated are as follows. First, in connection with an

ordinary lavatory bowl or basin, a person washing his hands and negligently forgetting his rings or other ornaments taken from the hands while washing, is protected from the loss of the same by their being washed downwardly into the drain when the stopper is removed to permit the water to discharge from the bowl or basin into the well. Thus, by inserting the fingers into the cup 2, the articles may be readily recovered, inasmuch as they cannot be washed out of reach. If, on the other hand, the device is used in connection with kitchen sinks or other places in which it is of importance that refuse be kept out of the drain pipes, the use of my improved device provides ready means for collecting such refuse and permitting its removal after the water is drained from the sink. Furthermore, it is to be noted that when a sanitary fixture is constructed in accordance with the present invention, everything may be made in one piece, thus obviating the use of bolts, screws, rivets, washers, etc. It is, therefore, unnecessary to drill any holes therefor. Moreover, a water seal is provided and in combination therewith a removable and interchangeable strainer which may be either single or combined, as pointed out in the specification. The partition forms a perfect water seal in connection with the water accumulated in the well 2. In this connection, it is also to be noted that the well is made of such a shape as will prevent its being bursted by freezing, it being enlarged upwardly toward its opening into the basin or sink.

As appears in Fig. 1, an overflow channel 16 is arranged to conform with the outer front wall of the bowl 1 and empties directly into the cup or well 2 on that side of the screening partition farthest from the drain pipe 3. In this way, said overflow channel 16 which communicates with the bowl above is cut off from direct communication with any part of the sewerage system, so that the egress of sewer gas therethrough is prevented.

A feature of great importance is to be noted in connection with the arrangement of the well or cup 2 in that the trap is brought just as close to the fixture itself as it is possible to bring it, thus complying with a sanitary rule of the highest importance.

What I claim is:

In a device of the character described, the combination with a sink or basin provided with a well into which it discharges, of a drain pipe leading from said well adjacent the bottom of said sink or basin in such manner as to retain a body of water within said well, a partition depending into the water within said well and providing an air-tight cover about the opening into said drain pipe, said partition being provided with a removable strainer plate reaching to the bottom of said well, and said strainer plate being provided with a horizontal portion provided with strainer openings and extending across the opening between said sink or basin and said well.

ADOLPH MEYER.

In the presence of—
J. B. MEGOWN,
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